



CASE REPORT

Delayed diagnosis of a Galeazzi fracture—A pain in the wrist

D.E. Deakin¹, J.M. Kendrew, E.P. Szypryt^{*}

Department of Orthopaedics, Queens Medical Centre, Derby Road, Nottingham, NG7 2UH, United Kingdom

Accepted 22 March 2006

Case history

A 23-year-old right-handed male presented to the emergency department with a painful right wrist having previously punched an opponent's elbow during an amateur boxing match. Examination in the Emergency Department demonstrated diffuse tenderness around the anatomical snuff box with limited range of movement at the radio-carpal joints. No pain or tenderness was elicited proximal to the wrist. Radiographs demonstrated no obvious abnormality (Fig. 1).

Repeat examination and radiographs of the wrist at fracture clinic the following day revealed no change in the patient's signs or symptoms. No tenderness was elicited at proximal to the wrist. The patient was diagnosed with a suspected scaphoid fracture and treated with a scaphoid plaster. Following review at 2 weeks the patient still complained tenderness of the anatomical snuff box and at no point complained of pain proximal to his wrist joint. Further radiograph examination showed no evidence of scaphoid fracture. Due to continuing symptoms a bone scan was arranged which was performed 3 weeks

following injury (Fig. 2). This demonstrated increased activity in the proximal forearm and distal radioulnar joint. Full length forearm radiographs demonstrated a fracture of the radius with delayed disruption of the distal radioulnar joint, not apparent on the initial radiographs (Fig. 3). The patient was subsequently successfully treated with open reduction and internal fixation.

Discussion

The Galeazzi fracture dislocation is a complex fracture-dislocation of the distal radioulnar joint associated with fracture to the radius, often at the junction of the middle and distal thirds.² It classically occurs after high velocity direct impact with forceful forearm pronation. The unstable nature of the injury frequently results in failure of non-operative management.³ Early recognition of the injury and treatment with open reduction and internal fixation is essential in adults.¹ This case demonstrates the possibility why this type of injury can be missed. Initial radiographs demonstrated a normal distal radioulnar joint and the patient at no point complained of any pain proximal to his wrist. A Galeazzi type injury should be considered in all patients presenting with atypical

^{*} Corresponding author.

E-mail address: dandeakin@doctors.org.uk (D.E. Deakin).

¹ Tel.: +44 7815 772 816.



Figure 1 AP and lateral radiographs of the wrist at initial presentation.

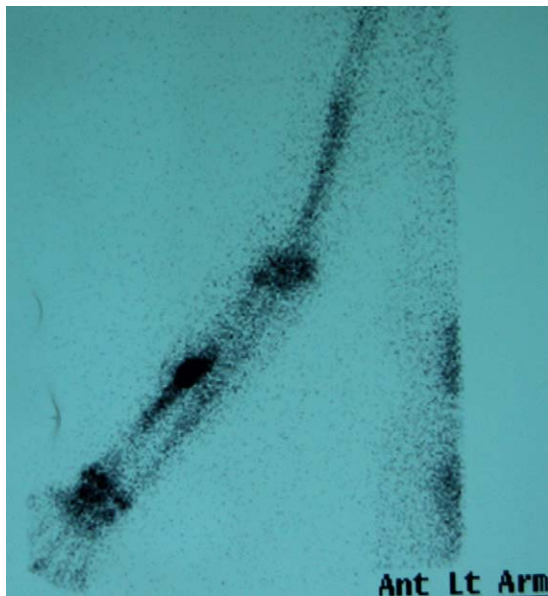


Figure 2 Bone scan 3 weeks following injury.

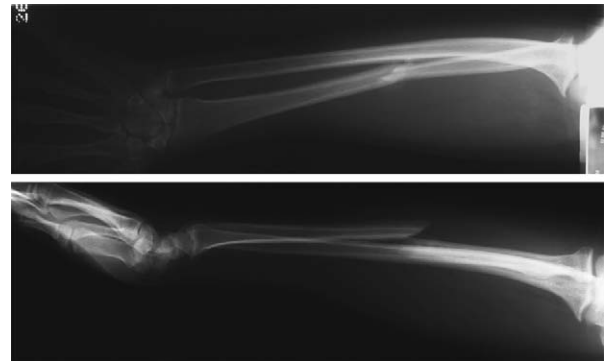


Figure 3 AP and lateral radiographs of the forearm 3 weeks following injury.

wrist pain following trauma. A Galeazzi fracture should be excluded with full length forearm radiograph.

References

1. Ramisetty NM, Revell M, Porter KM. Galeazzi fractures in adults. *Trauma* 2004;6:23–8.
2. Rettig ME, Raskin KB. Galeazzi fracture-dislocation: a new treatment-orientated classification. *J Hand Surg* 2001;26: 228–35.
3. Strehle J, Gerber C. Distal radioulnar joint function after Galeazzi fracture-dislocations treated by open reduction and internal plate fixation. *Clin Orthop* 1993;293:240–5.